

Application No. 09/714,477
Docket No. 2000U032.US
Reply to Action dated July 26, 2004

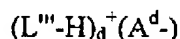
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-21 (Cancelled)

22. (New) A method for preparing a catalyst composition comprising the steps of:
- (a) providing a supported alumoxane, a Group 15 containing transition metal catalyst compound, and an ionizing activator described by the formula;



wherein L''' is a neutral Lewis base;

H is hydrogen;

$(L'''-H)^+$ is a Bronsted acid

A^{d-} is a non-coordinating anion having the charge $d-$

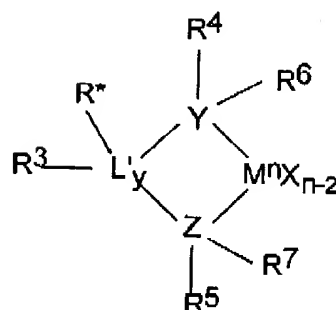
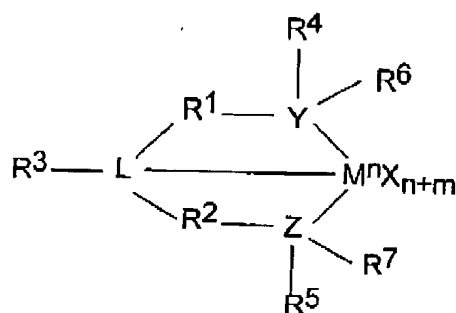
d is an integer from 1 to 3.

- (b) preparing a catalyst composition by combining the supported alumoxane compound with the Group 15 containing transition metal catalyst compound in mineral oil to form a slurried catalyst system, followed by addition of the ionizing activator and stirring for 1 to 24 hours to form the catalyst composition; or
- (c) preparing a catalyst composition by combining the supported alumoxane compound with mineral oil to form a slurry, followed by combining with the ionizing activator and stirring from 1 to 24 hours, followed by combining the Group 15 containing transition metal catalyst compound and stirring for 1 to 24 hours to form the catalyst composition;

characterized in that the mole ratio of the metal of the ionizing activator to the transition metal of the Group 15 containing transition metal catalyst compound is from 0.1 to 0.9.

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23. (New) The method of claim 22 wherein the Group 15 containing transition metal compound is a Group 15 containing bidentate or tridentate ligated transition metal catalyst compound.
24. (New) The method of claim 22 wherein the Group 15 containing transition metal compound has a transition metal bound to at least one leaving group and also bound to at least two Group 15 atoms, at least one of which is also bound to a Group 15 or 16 atom through another group.
25. (New) The method of claim 22, wherein the Group 15 containing transition metal catalyst compound is described by the formulae:



wherein M is a Group 4 metal;
each X is independently a leaving group;

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n is the oxidation state of M;

m is the formal charge of the YZL or the YZL' ligand;

L is a Group 15 or 16 element;

Y is a Group 15 element;

Z is a Group 15 element;

R¹ and R² are independently a C₁ to C₂₀ hydrocarbon group, a heteroatom containing group having up to twenty carbon atoms, silicon, germanium, tin, lead, or phosphorus;

R³ is absent or a hydrocarbon group, hydrogen, a halogen, a heteroatom containing group;

R⁴ and R⁵ is absent or a hydrocarbon group, hydrogen, a halogen, a heteroatom containing group;

R⁴ and R⁵ are independently an alkyl group, an aryl group, substituted aryl group, a cyclic alkyl group, a substituted cyclic alkyl group, a cyclic arylalkyl group, a substituted cyclic arylalkyl group or multiple ring system; wherein R¹ and R⁵ may be interconnected to each other;

R⁶ and R⁷ are independently absent, or hydrogen, an alkyl group, halogen, heteroatom or a hydrocarbyl group; and

R* is absent, or is hydrogen, a Group 14 atom, containing group, a halogen, a heteroatom containing group.

26. (New) A process for polymerizing olefin(s) in the presence of a catalyst composition of Claim 22.
27. (New) The process of claim 26 wherein the process is a gas phase process.
28. (New) The process of claim 26 wherein the supported activator comprises a support material and an activator.
29. (New) The process of claim 26 wherein the catalyst composition is in a slurry state.